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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,198	10/03/2005	John R Hacker	00758.1468USWO	2697

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EXAMINER	
WU, IVES J	

ART UNIT	PAPER NUMBER
1797	

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09/25/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/534,198	HACKER, JOHN R	
	Examiner	Art Unit	
	IVES WU	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 May 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *22-39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *22-39* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *11/23/2005;10/03/2005;05/06/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

(1). **Claims 22-39** are rejected under 35 U.S.C. 103(a) as being unpatentable over Clack et al (US 6051144A) in view of Rosaen (US 4721563).

As to a fluid filter cartridge comprising a) 1st and 2nd end caps; b) a fluid filter media pack secured to and extending between the 1st and 2nd end caps in **independent claim 22**, liquid filter media pack in **claim 23**, Clack et al (US 6051144A) disclose liquid filtration system and replaceable filter cartridge usable therewith (Title). It relates to a liquid filtration capable of ascertaining whether or not a properly-configured filter cartridge is installed in the system, additionally, it relates to a replaceable filter cartridge which is usable in such a system and which transmits a filter cartridge presence confirmation signal (Col. 1, line 16-22). As illustrated in the Figure below, it shows the end caps 544,546 and filter media pack secured between.

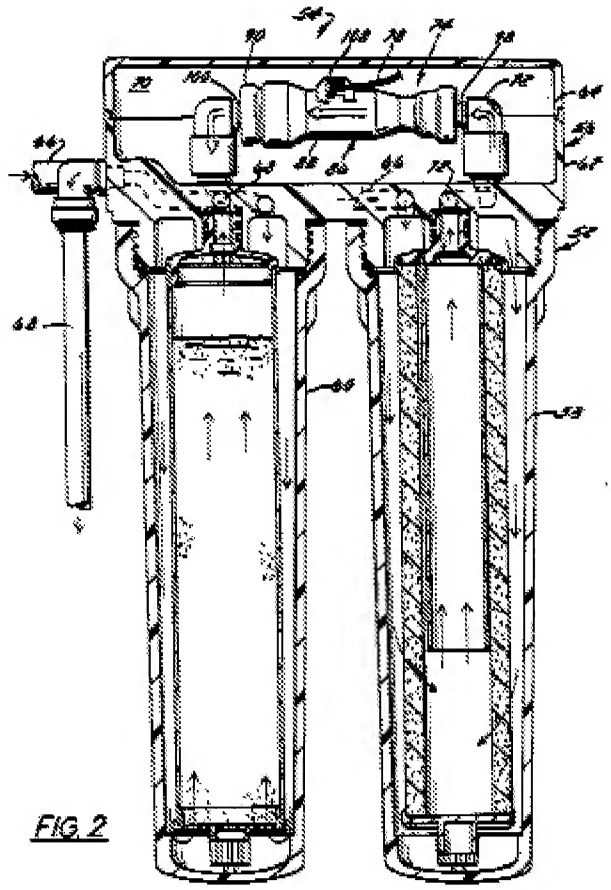

FIG. 2

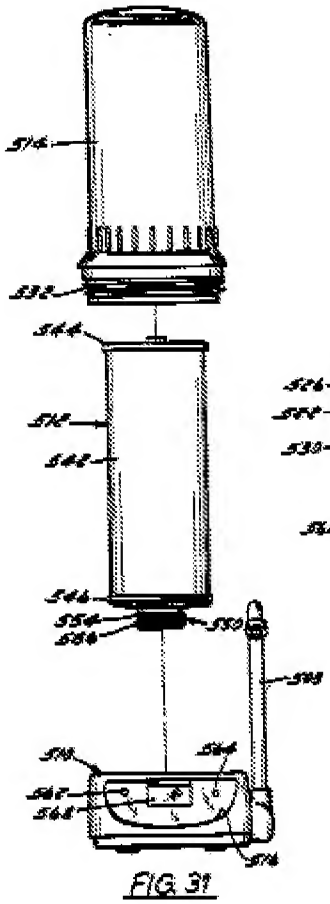

FIG. 31

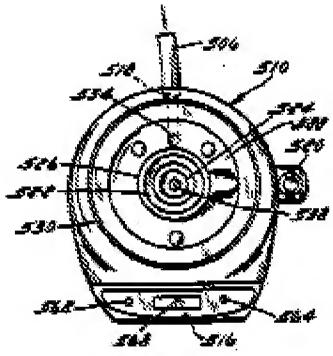

FIG. 33

As to c) a communication/sensor circuit completion unit operably positioned on the 1st cap (i) the communication/sensor circuit completion unit being configured to complete a selected communication/signal circuit only when the filter cartridge is properly mounted for use in a fluid filter cartridge in **independent claim 22**, Clack et al (US 6051144A) disclose, in accordance with 1st aspect, this object is achieved by providing an assembly comprising a 1st filter cartridge which is adapted for removable connection to a base of a liquid filter assembly, and a signal transmitter which is mounted on the filter cartridge and which is configured to transmit a signal indicative of the presence of the filter cartridge in the filter assembly. The transmitter preferably comprises a magnet which is configured to generate and transmit a magnetic field which is detectable by a magnetic field detector on the base (Col. 4, line 3-12). Preferably, the transmitter and the detector are configured such that the detector is capable of detecting whether or not the filter cartridge is properly configured for use with the base. Fir instance, the transmitter and the detector may be capable of detecting whether or not the filter cartridge has at least one of 1) a

filtration capacity of above a designated volume, and 2) a designated filtration medium (Col. 4, line 23-29). The filter cartridge presence confirmation signal could be transmitted in a variety of ways. An optical or RF reflector also could be mounted on the post 550 (Col. 21, line 3-14). This reflector would reflect a signal, transmitted from a corresponding transmitter on the base 510, back to suitable receiver on the base 510 (Col. 21, line 15-18).

As to an axial flex arrangement positioned on the 1st end cap and oriented aligned to support the communication/sensor circuit completion centrally in the 1st end cap, i) the axial flex arrangement being configured to allow for axial float of the communication/sensor circuit completion unit in **independent claim 22**, Clack et al (US 6051144A) disclose the base 510 centrally connected to the 1st end cap 546 as shown in the Figure above. Although the sensor assembly in Figure 3 of Clack et al is not centrally in the 1st end cap as claimed, it would be obvious to have the sensor assembly to be located centrally in the 1st end cap because the rearrangements of parts render obvious. *In re Kuhle, 526 F.2d 553, 188 USPQ 7 (CCPA 1975).* Clack et al **do not teach** the axial flex arrangement positioned on the 1st end cap to allow for axial float of the communication/sensor circuit completion unit as claimed.

However, Rosaen (US 4721563) **teaches** fluid filtering device (Title). As shown in the Figure 6 and 8, there is a coil spring positioned on the 1st end cap.

The advantage of coil spring is to hold the connection seated as well known in the art.

Therefore, it would have been obvious at time of the invention to install the coil spring disclosed by to the extended post of Clack et al in order to achieve the above-cited advantage.

As to 1st end is an open end cap and 2nd end cap to be closed end cap in **claim 24**, as shown in the Figures above, which read on the limitations of instant claim.

As to the media defines an interior surrounded by the filter cartridge in **claim 25**, as shown in the Figures above, which reads on the limitations of instant claim.

As to axial float arrangement comprising flexible ribs in **claim 26**, it would be obvious to have flexible ribs in the filtration system because design change does not affect function. *In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).*

As to 1st end cap including a collar that houses an o-ring groove in **claim 27**, as shown in the Figure 31 above, it includes the O-ring 554, 556 in the extending post.

As to 1st, 2nd end caps being molded end caps in **claim 28**, Clack et al (US 6051144A) disclose the 1st and 2nd end caps both being formed from unitary injection-molded plastic elements sealingly affixed to a respective one of the 1st and 2nd ends of the filter element (Col. 19, line 67 – Col. 20, line 4).

As to communication/sensor circuit completion unit being a reflector plug having a reflector surface that is not spherical in **claim 29**, and reflector surface having radial symmetry in **claim 31**, Clack et al (US 6051144A) disclose an optical or RF reflector (Col. 21, line 13-14).

As to reflector plus selected from glass and plastic in **claim 30**, chosen known material for suitability renders obvious. *In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960).*

As to components a) to d) in a fluid filter cartridge in **claim 32**, the disclosure of Clack is incorporated herein by reference, the most subject matters as currently claimed, have been recited in Applicant's claims 23-25, and have been discussed therein.

As to a) filter head having a fluid inlet and a fluid outlet in a fluid filter assembly in **independent claim 33**, as shown in Figure 2 above, which have liquid supply tube 66 and filtered water discharge 68.

As to b) cartridge-style filter assembly removably mounted on the filter head; the cartridge style filter assembly having a housing in **independent claim 33**, Clack et al (US 6051144A) disclose replaceable filter cartridge (Col. 1, line 20). As shown in the Figures above, it has housing for the cartridge as claimed.

As to component ii) of filter cartridge-style filter assembly in the fluid filter assembly in **independent claim 33**, the disclosure of Clack et al, Rosaen is incorporated herein by reference, the most subject matters as currently claimed, have been recited in Applicant's claim 22, and have been discussed therein.

As to axial float arrangement comprising flexible ribs in **claim 34**, the disclosure of Clack et al is incorporated herein by reference, the most subject matters as currently claimed, has been recited in Applicant's claim 26, and has been discussed therein.

As to 1st end cap including a collar that houses an O-ring groove in **claim 35**, the disclosure of Clack et al is incorporated herein by reference, the most subject matter as currently claimed, has been recited in Applicant's claim 27, and has been discussed therein.

As to 1st and 2nd end caps being molded end caps in **claim 36**, the disclosure of Clack et al is incorporated herein by reference, the most subject matter as currently claimed, has been recited in Applicant's claim 22, and have been discussed therein.

As to the communication/sensor circuit completion unit being a reflector plug having a reflector surface that is not spherical in **claim 37**, surface having radial symmetry in **claim 39**, the disclosure of Clack et al is incorporated herein by reference, the most subject matter as currently claimed, have been recited in Applicant's claims 29 and 31, and have been discussed therein.

As to reflector plug of communication/sensor circuit completion unit being selected from glass and plastic in **claim 38**, the disclosure of Clack et al is incorporated herein by reference, the most subject matter as currently claimed, has been recited in Applicant's claim 30, and has been discussed therein.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to IVES WU whose telephone number is (571)272-4245. The examiner can normally be reached on 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Examiner: Ives Wu
Art Unit: 1797
Date: September 19, 2008

/Jason M. Greene/
Primary Examiner, Art Unit 1797
9/23/08